

AMENDMENTS TO THE CLAIMS

Amendments to the claims are shown in the following listing of claims, which replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-156. (Canceled)

157. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 229-547 in the amino acid sequence set forth in SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca²⁺)-dependent manner.

158.-160. (Canceled)

161. (Currently amended) An isolated polynucleotide ~~according to claim 160~~ consisting of nucleotides 739-1695 ~~of set forth in~~ SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 157.

162. (Currently amended) An isolated polynucleotide ~~comprising~~ consisting of a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to nucleotides consisting of nucleotides~~ 739-1695 of SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes ~~[[a]] the polypeptide according to claim 157. that binds a carbohydrate in a Ca²⁺-dependent manner.~~

163. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 226-547 ~~of set forth in~~ SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca²⁺)-dependent manner.

164.-165. (Canceled)

166. (Currently amended) An isolated polynucleotide ~~according to claim 160~~ consisting of nucleotides 730-1695 in the nucleotide sequence ~~of set forth in~~ SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 163.

167. (Currently amended) An isolated polynucleotide ~~comprising~~ consisting of a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to~~ consisting of nucleotides 730-1695 of SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-

lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes ~~[[a]]~~ the polypeptide according to claim 163, that binds a carbohydrate in a Ca²⁺-dependent manner.

168. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 211-547 set forth in SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca²⁺)-dependent manner.

169.-170. (Canceled)

171. (Currently amended) An isolated polynucleotide ~~according to claim 160~~ consisting of nucleotides 685-1695 ~~of~~ set forth in SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 168.

172. (Currently amended) An isolated polynucleotide ~~comprising consisting of~~ a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to~~ consisting of nucleotides 685-1695 ~~of~~ set forth in SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes ~~[[a]]~~ the polypeptide according to claim 168, that binds a carbohydrate in a Ca²⁺-dependent manner.

173. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 206-547 set forth in SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca²⁺)-dependent manner.

174.-175. (Canceled)

176. (Currently amended) An isolated polynucleotide ~~according to claim 160~~ consisting of nucleotides 670-1695 ~~of~~ set forth in SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 173.

177. (Currently amended) An isolated polynucleotide ~~comprising consisting of~~ a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to~~ consisting of nucleotides 670-1695 ~~of~~ set forth in SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X

SSC/0.1% SDS, wherein the polynucleotide encodes [[a]] the polypeptide according to claim 173. that binds a carbohydrate in a Ca^{2+} -dependent manner.

178. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 102-547 ~~of set forth in~~ SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca^{2+})-dependent manner.

179.-180. (Canceled)

181. (Currently amended) An isolated polynucleotide ~~according to Claim 160~~ consisting of nucleotides 358-1695 in the nucleotide sequence ~~of set forth in~~ SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 178.

182. (Currently amended) An isolated polynucleotide ~~comprising consisting of~~ a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to consisting of~~ nucleotides 358-1695 ~~of set forth in~~ SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes [[a]] the polypeptide according to claim 178. that binds a carbohydrate in a Ca^{2+} -dependent manner.

183. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 91-547 ~~of set forth in~~ SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca^{2+})-dependent manner.

184.-185. (Canceled)

186. (Currently amended) An isolated polynucleotide ~~according to claim 160~~ consisting of nucleotides 325-1695 ~~of set forth in~~ SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 183.

187. (Currently amended) An isolated polynucleotide ~~comprising consisting of~~ a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to consisting of~~ nucleotides 325-1695 ~~of set forth in~~ SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes [[a]] the polypeptide according to claim 183. that binds a carbohydrate in a Ca^{2+} -dependent manner.

188. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 9-547 ~~of set forth in~~ SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca^{2+})-dependent manner.

189.-190. (Canceled)

191. (Currently amended) An isolated ~~polypeptide polynucleotide according to claim 160~~ consisting of nucleotides 79-1695 ~~of set forth in~~ SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 188.

192. (Currently amended) An isolated polynucleotide ~~comprising~~ consisting of a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to~~ consisting of nucleotides 79-1695 ~~of set forth in~~ SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes ~~[[a]] the polypeptide according to claim 188. that binds a carbohydrate in a Ca^{2+} -dependent manner.~~

193. (Currently amended) An isolated polypeptide ~~according to claim 156~~ consisting of amino acids 1-547 ~~of set forth in~~ SEQ ID NO: 2, wherein the polypeptide binds to a carbohydrate in a calcium ion (Ca^{2+})-dependent manner.

194.-195. (Canceled)

196. (Currently amended) An isolated polynucleotide ~~according to claim 160~~ consisting of nucleotides 55-1695 ~~of set forth in~~ SEQ ID NO: 1, wherein the polynucleotide encodes the polypeptide according to claim 193.

197. (Currently amended) An isolated polynucleotide ~~comprising~~ consisting of a nucleotide sequence that hybridizes complementary to a polynucleotide ~~complementary to~~ consisting of nucleotides 55-1695 ~~of set forth in~~ SEQ ID NO: 1 under the following hybridization conditions: hybridization at 55°C in a hybridization solution ~~comprising of~~ 5 X SSC, 1% blocking agent, 0.1% N-lauroyl sarcosine and 0.02% SDS; and washing at 55°C in a wash solution ~~comprising of~~ 2 X SSC/0.1% SDS, wherein the polynucleotide encodes ~~[[a]] the polypeptide according to claim 193. that binds a carbohydrate in a Ca^{2+} -dependent manner.~~

198. (Canceled)

199. (Currently amended) A vector comprising the polynucleotide according to claim 161, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 229-547 of SEQ ID NO: 2.~~

200. (Currently amended) A vector comprising the polynucleotide according to claim 166, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 226-547 of SEQ ID NO: 2.~~

201. (Currently amended) A vector comprising the polynucleotide according to claim 171, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 211-547 of SEQ ID NO: 2.~~

202. (Currently amended) A vector comprising the polynucleotide according to claim 176, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 206-547 of SEQ ID NO: 2.~~

203. (Canceled)

204. (Currently amended) A vector comprising the polynucleotide according to claim 181, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 102-547 of SEQ ID NO: 2.~~

205. (Currently amended) A vector comprising the polynucleotide according to claim 186, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 91-547 of SEQ ID NO: 2.~~

206. (Currently amended) A vector comprising the polynucleotide according to claim 191, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 9-547 of SEQ ID NO: 2.~~

207. (Currently amended) A vector comprising the polynucleotide according to claim 196, ~~inserted into the vector for expression of a polypeptide consisting of amino acids 1-547 of SEQ ID NO: 2.~~

208. (Canceled)

209. (Currently amended) An isolated host cell comprising the vector according to claim 199, ~~inserted for expression of the polypeptide consisting of amino acids 229-547 of SEQ ID NO: 2.~~

210. (Currently amended) An isolated host cell comprising the vector according to claim 200, ~~inserted for expression of the polypeptide consisting of amino acids 226-547 of SEQ ID NO: 2.~~

211. (Currently amended) An isolated host cell comprising the vector according to claim 201, ~~inserted for expression of the polypeptide consisting of amino acids 211-547 of SEQ ID NO: 2.~~

212. (Currently amended) An isolated host cell comprising the vector according to claim 202, ~~inserted for expression of the polypeptide consisting of amino acids 206-547 of SEQ ID NO: 2.~~

213. (Canceled)

214. (Currently amended) An isolated host cell comprising the vector according to claim 204, ~~inserted for expression of the polypeptide consisting of amino acids 102-547 of SEQ ID NO: 2.~~

215. (Currently amended) An isolated host cell comprising the vector according to claim 205, ~~inserted for expression of the polypeptide consisting of amino acids 91-547 of SEQ ID NO: 2.~~

216. (Currently amended) An isolated host cell comprising the vector according to claim 206, ~~inserted for expression of the polypeptide consisting of amino acids 9-547 of SEQ ID NO: 2.~~

217. (Currently amended) An isolated host cell comprising the vector according to claim 207, ~~inserted for expression of the polypeptide consisting of amino acids 1-547 of SEQ ID NO: 2.~~

218. (Currently amended) A probe comprising the polynucleotide according to claim 161 and for screening for a homologue, consisting of nucleotides 739-1695 in the nucleotide sequence of SEQ ID NO: 1.

219. (Currently amended) An isolated polynucleotide that hybridizes with the probe according to claim 218 and that is an amplification product from a PCR reaction performed using primers consisting of the nucleotide sequences of caatctgatgagaaggtgatg (SEQ ID NO: 4) and acgaggggctggatggacat (SEQ ID NO: 5), ~~wherein the polynucleotide encodes a polypeptide that binds a carbohydrate in a Ca²⁺-dependent manner.~~